

What is claimed is:

1. A valve, comprising:

a rotatable housing having a duct adapted to receive a gas;

an outer housing ring seal;

a ring seal between said rotatable housing and said outer housing ring seal, said ring seal having a bore adapted to allow gas flow to or from said duct.

2. The valve of claim 1, further comprising means for causing gas to flow through radial duct and between said ring seal and said outer housing ring seal.

3. The valve of claim 1, wherein said valve further comprises a mounting ring coupled to said rotatable housing and a retaining ring spaced from said mounting ring and coupled to said rotatable housing, and wherein said ring seal is positioned between said mounting ring and said retaining ring.

4. The valve of claim 3, further comprising a bearing between said ring seal and said mounting ring.

5. The valve of claim 4, wherein said ring seal comprises a second bore adapted to receive gas from said radial duct so as to bias said ring seal against movement towards said bearing.

6. The valve of claim 1, further comprising:

a first valve port and a second valve port separate from said first valve port; and

a flow distributor having an inlet passageway and an outlet passageway, said flow distributor being movable with respect to

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said first and second valve ports between a first position in which said first valve port is in fluid communication with said inlet passageway and said second valve port is in fluid communication with said outlet passageway, and a second position in which said first valve port is in fluid communication with said outlet passageway and said second valve port is in fluid communication with said inlet passageway; said flow distributor comprising a blocking surface which blocks flow through a first portion of said first valve port and through a second portion of said second valve port when said flow distributor is between said first and second positions.

7. A valve, comprising:

a rotatable housing;

an outer housing ring seal;

a ring seal between said rotatable housing and said outer housing ring seal; and

a manifold about said outer housing ring seal supplying pressurized gas about said ring seal.

8. A regenerative thermal oxidizer for processing a gas, comprising:

a combustion zone;

a first heat exchange bed containing heat exchange media and in communication with said combustion zone;

a second heat exchange bed containing heat exchange media and in communication with said combustion zone;

a rotatable switch valve for alternating the flow of said gas between said first and second heat exchange beds, said rotatable switch valve comprising a radial duct, an outer housing, and a ring seal in fluid communication with said radial duct, said ring seal having a bore adapted to allow gas flow to or from said radial duct and form a pressurized seal with said outer housing.

9. The regenerative thermal oxidizer of claim 8, wherein said rotatable switch valve further comprises a first valve port in fluid communication with said first heat exchange bed and a second valve port separate from said first valve port, said regenerative thermal oxidizer further comprising a cold face plenum comprising at least one baffle for dividing said first and second valve ports into a plurality of chambers.

10. The regenerative thermal oxidizer of claim 9, wherein each of said chambers is congruent.

11. The regenerative thermal oxidizer of claim 8, wherein said rotatable switch valve is housed in a manifold having a manifold inlet and a manifold outlet, and said rotatable switch valve comprises an inlet passageway and an outlet passageway, and wherein said manifold inlet is in fluid communication with said inlet passageway of said rotary valve, and said manifold outlet is in fluid communication with said outlet passageway of said rotatable switch valve.

Sub A3 > 12. The regenerative thermal oxidizer of claim 8, further comprising means for causing gas to flow into said radial duct,

and between said ring seal and said outer housing ring seal.

13. The regenerative oxidizer of claim 8, further comprising drive means for rotating said switch valve.

14. A rotatable valve for directing the flow of a fluid, comprising:

a rotatable housing;

a stationary wall spaced from said rotatable housing and defining with said housing a sealing space;

seal means positioned between said rotatable housing and said stationary wall in said sealing space, said seal means being adapted to receive a gas in said sealing space and bias against said wall.